FIG. 1

FIG. 2

FIG. 3A

/35

Load Planning Tables

Group /35

Group ID

Load /36

Group ID	Load ID	Master Load	Carrier ID	Tariff	Pro #	Inbnd/ Outbnd	Origin	Dest

Stop /37

Group ID	Load ID	Stop #	DropBillNr	DropLoad	DropDC ID	Parent Load

/38

Shipment Header

Group ID	Load ID	Bill #	Origin	Dest

Cost /39

Group ID	Load ID	Cost Type	Amount

FIG. 3B

42 ● ————————————— ● 43 B1
                            60601

55420

FIG. 4A

41

Direct Shipment Records from Load Planning Tables

Group

Group ID
G1

Load

Group ID	Load ID	Master Load	Carrier ID	Tariff	Pro #	Inbnd/ Outbnd	Origin	Dest
G1	L1	ML1	UPS	UPSGD	1Z...	OUTBD	55420	60601

Stop

Group ID	Load ID	Stop #	DropBillNr	DropLoad	DropDC ID	Parent Load
G1	L1	0	B1			

Shipment Header

Group ID	Load ID	Bill #	Origin	Dest
G1	L1	B1	55420	60601

Cost

Group ID	Load ID	Cost Type	Amount
G1	L1	LINEHL	25.00
G1	L1	DOD	10.00
G1	L1	SATDEL	5.00

FIG. 4B

52 — 53 B1, B2
60601
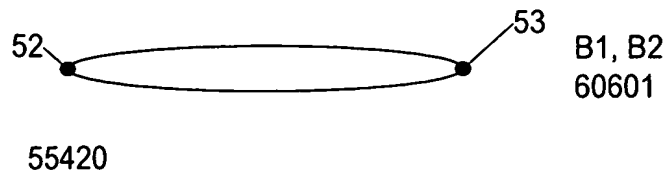
55420

FIG. 5A

51

Direct Consolidation Records from Load Planning Tables

Group

Group ID
G1

Load

Group ID	Load ID	Master Load	Carrier ID	Tariff	Pro #	Inbnd/ Outbnd	Origin	Dest
G1	L1	ML1	RDWY	507A	123	OUTBD	55420	60601

Stop

Group ID	Load ID	Stop #	DropBillNr	DropLoad	DropDC ID	Parent Load
G1	L1	0	B1			
G1	L1	0	B2			

Shipment Header

Group ID	Load ID	Bill #	Origin	Dest
G1	L1	B1	55420	60601
G1	L1	B2	55420	60601

Cost

Group ID	Load ID	Cost Type	Amount
G1	L1	LINEHL	1000.00
G1	L1	INSDEL	50.00

FIG. 5B

FIG. 6A

FIG. 6B

FIG. 7A

FIG. 7B
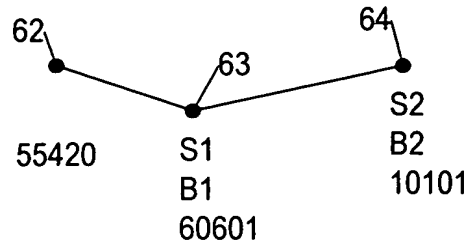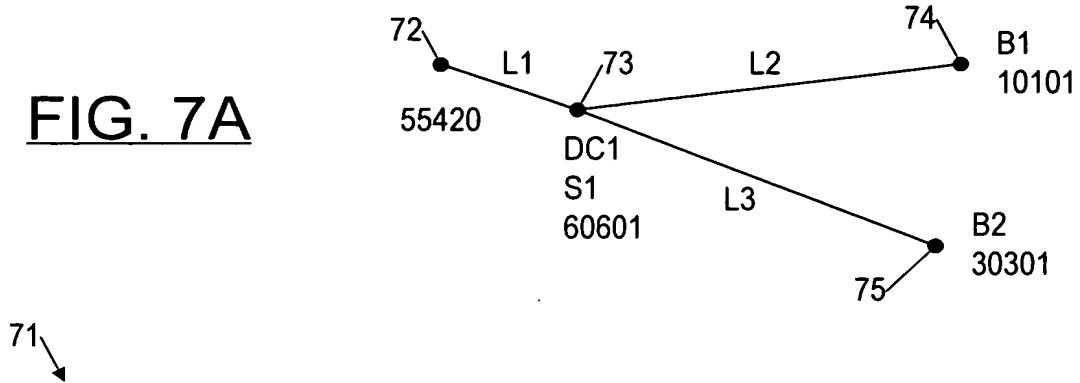
Distribution Center Truckload *Records from Load Planning Tables*

Group

Group ID
G1

Load

Group ID	Load ID	Master Load	Carrier ID	Tariff	Pro #	Inbnd/ Outbnd	Origin	Dest
G1	L1	ML1	DART	500	123	OUTBD	55420	60601
G1	L2	ML1	UPS	UPSGD	1Z...	OUTBD	60601	10101
G1	L3	ML1	RDWY	507A	987	OUTBD	60601	30301

Stop

Group ID	Load ID	Stop #	DropBillNr	DropLoad	Drop DC ID	Parent Load
G1	L1	1		L2	DC1	
G1	L1	1		L3	DC1	
G1	L2	0	B1			L1
G1	L3	0	B2			L1

Shipment Header

Group ID	Load ID	Bill #	Origin	Dest
G1	L2	B1	55420	10101
G1	L3	B2	55420	30301

Cost

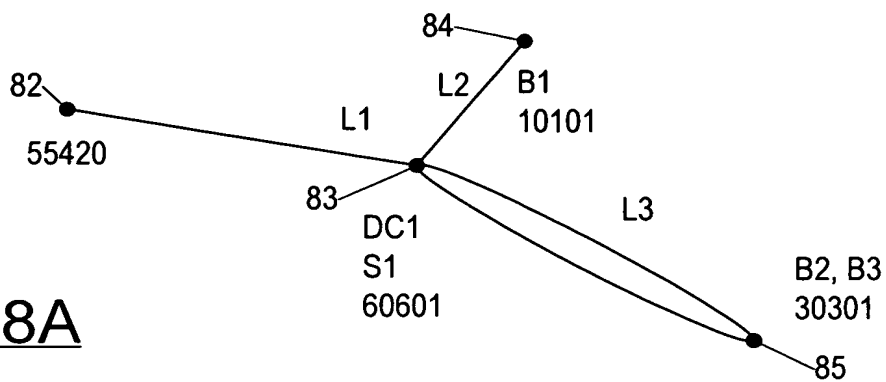| Group ID	Load ID	Cost Type	Amount
G1	L1	LINEHL	1000.00
G1	L2	LINEHL	25.00
G1	L2	COD	10.00
G1	L3	MIN	100.00
G1	L3	COD	10.00

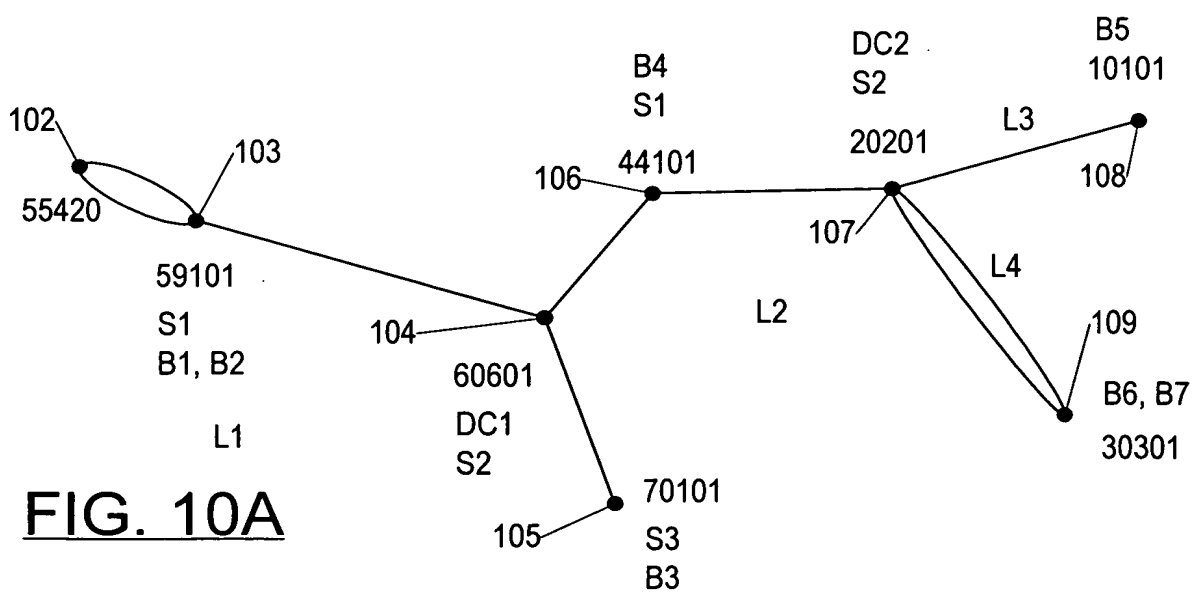**FIG. 8A**
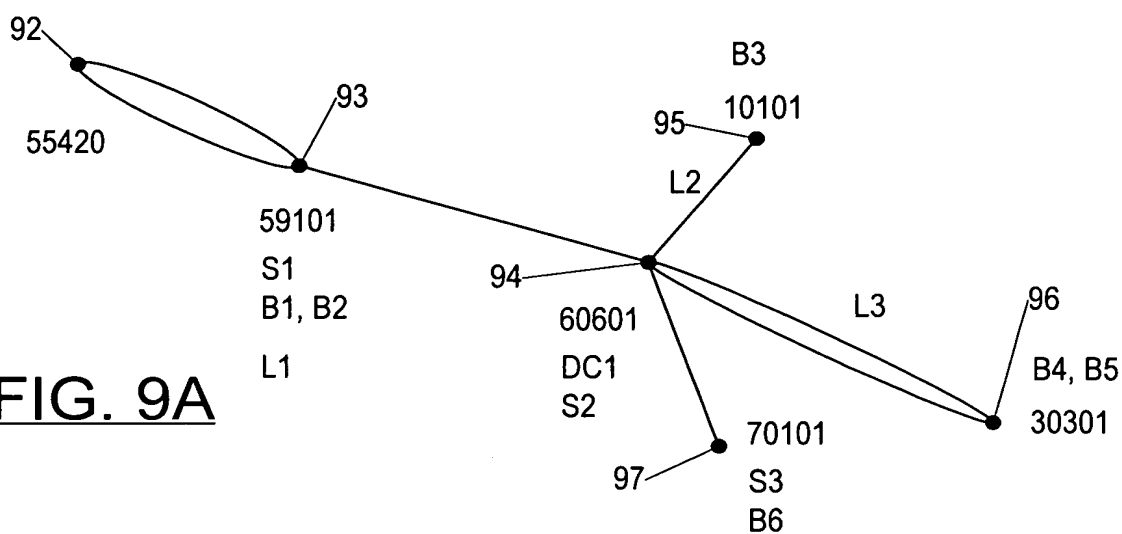
FIG. 9A

FIG. 10A

81

Consolidation out of a Distribution Center Records from Load Planning Tables

Group

Group ID
G1

Load

Group ID	Load ID	Master Load	Carrier ID	Tariff	Pro #	Inbnd/ Outbnd	Origin	Dest
G1	L1	ML1	DART	500	123	OUTBD	55420	60601
G1	L2	ML1	UPS.	UPSGD	1Z...	OUTBD	60601	10101
G1	L3	ML1	RDWY	507A	987	OUTBD	60601	30301

Stop

Group ID	Load ID	Stop #	DropBillNr	DropLoad	DropDC ID	Parent Load
G1	L1	1		L2	DC1	
G1	L1	1		L3	DC1	
G1	L2	0	B1			L1
G1	L3	0	B2			L1
G1	L3	0	B3			L1

Shipment Header

Group ID	Load ID	Bill #	Origin	Dest
G1	L2	B1	55420	10101
G1	L3	B2	55420	30301
G1	L3	B3	55420	30301

Cost

Group ID	Load ID	Cost Type	Amount
G1	L1	LINEHL	1000.00
G1	L2	LINEHL	25.00
G1	L2	COD	10.00
G1	L3	LINEHL	200.00
G1	L3	COD	10.00

FIG. 8B

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Combination Multistop, Distribution Center, and Consolidation Records

Group

Group ID
G1

Load

Group ID	Load ID	Master Load	Carrier ID	Tariff	Pro #	Inbnd/ Outbnd	Origin	Dest
G1	L1	ML1	DART	500	123	OUTBD	55420	70101
G1	L2	ML1	UPS	UPSGD	1Z...	OUTBD	60601	10101
G1	L3	ML1	RDWY	507A	987	OUTBD	60601	30301

Stop

Group ID	Load ID	Stop #	DropBillNr	DropLoad	DropDC ID	Parent Load
G1	L1	1	B1			
G1	L1	1	B2			
G1	L1	2		L2	DC1	
G1	L1	2		L3	DC1	
G1	L1	3	B6			
G1	L2	0	B3			L1
G1	L3	0	B4			L1
G1	L3	0	B5			L1

Shipment Header

Group ID	Load ID	Bill #	Origin	Dest
G1	L1	B1	55420	59101
G1	L1	B2	55420	59101
G1	L2	B3	55420	10101
G1	L3	B4	55420	30301
G1	L3	B5	55420	30301
G1	L1	B6	55420	70101

Cost

Group ID	Load ID	Cost Type	Amount
G1	L1	LINEHL	1000.00
G1	L1	STPOFF	100.00
G1	L2	LINEHL	25.00
G1	L2	COD	10.00
G1	L3	LINEHL	200.00

FIG. 9B

Nested Loads Records from Load Planning Tables → 101

Group

Group ID
G1

Load

Group ID	Load ID	Master Load	Carrier ID	Tariff	Pro #	Inbnd/Outbnd	Origin	Dest
G1	L1	ML1	DART	500	123	OUTBD	55420	70101
G1	L2	ML1	ABC	500	543	OUTBD	60601	20201
G1	L3	ML1	UPS	UPSGD	1Z...	OUTBD	20201	10101
G1	L4	ML1	RDWY	507A	987	OUTBD	20201	30301

Stop

Group ID	Load ID	Stop #	DropBillNr	DropLoad	DropDC ID	Parent Load
G1	L1	1	B1			
G1	L1	1	B2			
G1	L1	2		L2	DC1	
G1	L1	3	B3			
G1	L2	1	B4			L1
G1	L2	2		L3	DC2	L1
G1	L2	2		L4	DC2	L1
G1	L3	0	B5			L2
G1	L4	0	B6			L2
G1	L4	0	B7			L2

Shipment Header

Group ID	Load ID	Bill #	Origin	Dest
G1	L1	B1	55420	59101
G1	L1	B2	55420	59101
G1	L1	B3	55420	70101
G1	L2	B4	55420	44101
G1	L3	B5	55420	10101
G1	L4	B6	55420	30301
G1	L4	B7	55420	30301

Cost

Group ID	Load ID	Cost Type	Amount
G1	L1	LINEHL	1000.00
G1	L1	STPOFF	100.00
G1	L2	LINEHL	500.00
G1	L2	STPOFF	50.00
G1	L3	LINEHL	25.00

FIG. 10B